

**Amendments to the claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended) A sorting device for sorting granules, objects or the like (9) within a bulk of such objects (9), where the objects (9) differ in quality, which sorting device comprises positioning means giving a well-separated position for each granule, object or the like (9), detecting means, at least one source (10) of electromagnetic radiation or sonic waves, ejecting means and receiving means, ~~characterized in that~~  
wherein the positioning means is comprises a cylinder (1) having a number of pockets (3) placed in rows along the inner circumference of the cylinder (1) and that the cylinder (1) is rotated with such a high speed that the granules or the like (9) are positioned and held in the pockets (3) for a time sufficient for detection and ejection.
  
2. (currently amended) The sorting device of claim 1 ~~characterized in that~~,  
wherein the granules or the like (9) are positioned and held in the pockets by means of centrifugal force at the top of the turn of the cylinder (1).
  
3. (currently amended) The sorting device of claim 2 ~~or 3, characterized in that~~  
wherein one detecting means is placed for co-operation with each row and that the detecting means contains one or more detectors (5) for emitted, transmitted and/or reflected light or radiation or sonic waves, a CCD-camera (s), a diode array (s) or a photocell (s) and that the detecting means comprises at least one source of electromagnetic radiation and/or sound.

4. (currently amended) The sorting device of claim 3, characterized in that  
wherein the source of electromagnetic radiation is comprises at least one light emitting diode.

5. (currently amended) The sorting device of claim 3 or 4, characterized in that  
wherein the detecting means is arranged for co-operation with several rows of pockets (3) by means of fiber optic cables (12), filters and/or that a lens is placed at the end of each fiber optic cable (12).

6. (currently amended) The sorting device of any of the previous claims,  
characterized in that claim 1, wherein the ejecting means is comprises at least one ejector (6) placed in connection with each row of pockets and for co-operation with the detecting means and that a source of compressed air is connected to at least one ejector by means of one or more single way valves or multi way valves; that the ejecting means has the form of flaps opening to the outside of a cylinder (1) or the like; that the ejecting means has the form of at least two parts of the positioning means moving away from each other; or that the ejecting means has the form of a rod.

7. (currently amended) The sorting device of any of the previous claims,  
characterized in that claim 1, wherein at least one receiving means (7) is placed to receive the objects (9) or the like being ejected by the ejecting means (6); that at least one receiving means is placed to receive the objects (9) by means of gravity; and/or that the receiving means (7) are troughs (13) having a conveying mechanism at the bottom leading to a receptacle.

8. (currently amended) The sorting device of ~~any of the previous claims~~,  
~~characterized in that claim 1, wherein~~ an opening (4) is furnished in the bottom of each pocket (3), which opening (4) is small enough not to let the granules or the like (9) through; and/or that each pocket (3) is adapted to capture and hold the granule or the like (9) and has a form in the area of the opening (4) that facilitates that the object is positioned to fully cover the opening (4).

9. (currently amended) The sorting device of ~~any of the previous claims~~,  
~~characterized in that it claim 1, further comprising includes~~ a timer, used to control the position of each pocket (3) and/or object (9) in relation to the detecting and ejecting means; and/or that the detecting means and ejecting means are connected to a micro controller unit, MCU.

10. (currently amended) The sorting device of claim 9, ~~characterized in that wherein~~ an A/D converter is placed between each detecting means and the MCU and that the MCU includes at least a processor, an EEPROM and I/O units.

11. (currently amended) The sorting device of ~~any of the claims 1 to 9, characterized in that claim 1, wherein~~ each detecting means is placed in close proximity to an ejecting means (6).

12. (currently amended) Method for sorting granules, grains etc. into different fractions, ~~characterized in that wherein~~ the granules are separated in such a way that each single granule passes a detecting means in a well-separated position, that at least subgroup of the granules is actively ejected into a receiving means in accordance with

detected properties, and that centrifugal forces are used in connection to positioning and holding of the objects (9) in the well-separated positions when passing the detecting and ejecting means.

13. (currently amended)      The method of claim 12, ~~characterized in that~~ wherein the granules etc. are divided into two or more subgroups depending on detected qualities of each single granule etc.